



**CONTRA COSTA
WATER DISTRICT**

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Dear Chairman Isenberg and Council Members:

Contra Costa Water District (CCWD) appreciates the opportunity to comment on the Third Staff Draft Delta Plan dated April 22, 2011. This draft is the most comprehensive to date but can be improved by addressing the following issues:

BAY DELTA CONSERVATION PLAN

The Delta Plan should recommend that any new conveyance facilities improve water supply reliability while protecting the environment consistent with the coequal goals. One way this can be accomplished is by diverting more water during the wet periods and less water during the dry periods. As this wet year has demonstrated, a large new intake would not have enabled the Bay Delta Conservation Plan (BDCP) proponents to take more water because there is nowhere to store the water. Increased storage, as groundwater or surface storage, is the most effective way to increase water supply reliability for the state of California.

During the panel discussion on BDCP, council member Gray asked if continued south Delta pumping was a key assumption as the basis for the sizing and operation of the proposed conveyance facility. There are only three highly unlikely circumstances in which pumping in the south Delta could be forced to stop permanently:

- a. Climate change significantly alters the patterns and quantity of precipitation, essentially eliminating the river system as we know it. This situation would mean a permanent drought and any alternative conveyance regardless of size or location would not improve water supply reliability.
- b. Regulations, and there are none to suggest that is necessary.
- c. An oversized peripheral canal is built and operated so that the Sacramento River is completely diverted before it reaches the Delta, allowing sea water to intrude far upstream and eliminating the existing agricultural, municipal and industrial beneficial uses in the Delta.

Based on the BDCP results to date, none of the conveyance alternatives will produce more water during dry periods. During wet periods, a large intake facility in the north is unnecessary because a smaller facility can be operated in conjunction with the existing pumps in the south Delta. As noted above, a large new intake would not enable the

BDCP proponents to take more water during the wet periods because there is nowhere to store the water, therefore the only time more water could be diverted by a large facility would be during normal and dry times which would further exacerbate the existing problems in the Delta.

IMMEDIATE ACTIONS

Although there is a section in the current draft of the Delta Plan for “phasing of the Delta Plan and the first five years” (p.13), there are no milestones or performance measures included for the first five years. The Delta Plan should include performance milestones for the first five years of the Delta Plan such as water supply reliability improvements, ecosystem restoration projects, emergency preparedness improvements, levee improvement priorities, and conveyance and/or storage improvements. The Delta Plan should contain time-bound and measureable milestones for each of these activities. A specific list of recommendations is included in the attachment.

WATER RESOURCES POLICIES

The Delta Plan should recommend that local agencies identify investment opportunities for improving regional water supply, conservation and water use efficiency consistent with Water Code Section 85021. The Delta Plan should not mandate that all water suppliers include investment plans for each activity currently listed as part of water resources policy #1 (p. 47). Each region should optimize the suite of strategies that are most regionally appropriate as some of the listed elements will not be relevant to a specific region or as effective as other strategies. Specific language for the proposed water resources policies and recommendations are included in the attachment.

WATER QUALITY

The water quality policies listed in the Delta Plan are improved but remain insufficient. The Delta Plan water quality policies should state that any covered action shall avoid degrading drinking water quality consistent with existing regulations (State Water Resources Control Board (SWRCB) Resolution No. 68-16, SWRCB Resolution No. 88-63, 40 Code of Federal Regulations section 131.12) and that any unavoidable degradation associated with the covered action must be mitigated to a less than significant level. The Delta Plan should also include a recommendation that all dischargers improve the quality of discharged water to the extent feasible through treatment or best management practices. Specific language for the proposed water quality policies and recommendations are included in the attachment.

PERFORMANCE MEASURES

Water code section 85211 states that “*the performance measures shall include quantitative or otherwise measureable assessment of the status and trends*”; the current draft of the Delta Plan fails to do this. The performance measures are vague and the existing conditions are not quantified therefore quantifying progress or improvements will be impossible. For example, the Delta Plan should quantify the existing water

supply reliability for the state of California, identify the problems and limitations of the current estimate, identify how the estimate can be improved in the next update of the Delta Plan and set a target level of water supply reliability by the end of the Delta Plan planning horizon either by a percent increase or an absolute level.

USING THE BEST AVAILABLE SCIENCE

The Delta Plan policies should be well supported by the best available science and currently they are not. There is a lack of references throughout the document (with the exception of the adaptive management chapter) and an overreliance on material that has not been peer reviewed. The independent science board has explained to the Council on numerous occasions that peer reviewed journal articles are the best available science and should be used whenever possible. For example, of the 13 references in Chapter 4 A More Reliable Water Supply for California, only three of the references have been peer reviewed and Hanak's 2011 report was cited eight times.

Our recommendations addressing these important issues and other outstanding issues are attached. CCWD looks forward to providing further input to the Delta Plan as the process continues. Please call me at (925) 688-8018 or Maureen Martin at (925) 688-8323 if you have any questions or concerns.

Sincerely,



Marguerite Naillon
Special Projects Manager

MN/MM:wec

Attachment

Attachment
Contra Costa Water District's Technical Edits
Third Staff Draft Delta Plan

Chapter 1: The Delta Plan

Best Available Science - This chapter lacks references and the legislation clearly states that the Delta Plan should be based on the best available science. The references should be peer-reviewed journal sources whenever possible. Please update references in this chapter and throughout the document as consistent with the charge to use the best available science.

p. 9 lines 30- 31 – need references for the numbers given.

p. 9 line 36 – should include a description of the State Water Project and the Central Valley Project with references.

p. 9 lines 39-42 – need references

p. 10 line 11 – need reference

p. 10 line 17 – need reference

p. 10 line 36 – *should also acknowledge that upstream reservoirs provide flood protection and water supply. Those dual objectives complicate water management and add a degree of operational inflexibility*

p. 10 line 40 – needs reference

p. 11 Table 1-1 - The references for this table are incomplete in the footnotes. The population increase seems too optimistic if it is based on pre-recession data. The probabilistic statements in the table are confusing at best and most likely incorrect, especially for the high water reference. The table could be restructured so that there is a column to quantify the existing or recent historical values and another column indicating values for a future date and a description of the change.

p. 12 line 10 – needs a reference

p. 12 line 11 – It is not clear from this description over what period this reduction will be achieved.

p. 12 line 16 – need to clarify if imported water interruptions are for short or long duration since a large percentage of the state relies on imported water.

Performance Measures – The section on page 11 describing what the Delta Plan will achieve by 2100 is the appropriate place to introduce specific performance metrics. For example, what is the current level of state-wide water supply reliability and what should the target goal be in the future. How many restoration projects have been completed to date and how many more are scheduled for completion in the near future. What will the completion of those projects mean in the context of achieving the coequal goals.

Immediate Actions - This chapter should also include concrete milestones for the first five years as the heading suggests on page 13. Please include a timeline similar to the one provided below in this section.

Initial five years (2012-2016)

- *Develop and implement a strategy to appropriately engage participation of the federal agencies with responsibilities in the Delta (Section 85082)*
- *Review, adopt and implement a coordinated emergency response plan (Section 85309)*
- *Review and consider Delta flow criteria (Section 85084.5)*
- *Review and consider Bay Delta Conservation Plan (Section 85302)*
- *Implement levee improvements to protect key infrastructure*
- *Increase conservation of consumed water*
- *Increase water recycling especially in export areas where wastewater is not returned to Delta tributaries, the Delta, Suisun Marsh or Suisun Bay*
- *Improve treatment and water quality of wastewater discharges and runoff (urban and agricultural) to Delta tributaries, the Delta, Suisun Marsh and Suisun Bay*
- *Implement Two Gates Fish Protection Demonstration Project (Section 85085 (a))*
- *Evaluate effectiveness of, and implement a viable Threemile Slough barrier (Section 85085 (b))*
- *Implement Pilot Fish Screen Project at Clifton Court Forebay (Section 85085 (c))*
- *Implement Dutch Slough Tidal Restoration Project (Section 85085 (d)), including completion of Contra Costa Canal Encasement Project*
- *Implement 8,000 acres of habitat restoration projects, per the existing permit conditions*
- *Complete new storage feasibility studies (including environmental documents where required)*

Near Term (2017-2025)

- *Implement BDCP if included in Delta Plan*
- *Continue levee and emergency response planning and implementation*
- *Implement storage projects*
- *Continue conservation of consumed water*
- *Continue water recycling especially in export areas where wastewater is not returned to Delta tributaries, the Delta, Suisun Marsh or Suisun Bay*
- *Improve treatment and water quality of wastewater discharges and runoff (urban and agricultural) to Delta tributaries, the Delta, Suisun Marsh and Suisun Bay*

Mid-Century (2026 – 2050)

- *Implement additional habitat restoration programs*
- *Continue implementation of other programs (levees, emergency planning, ecosystem restoration, water quality and supply projects)*
- *Continue conservation of consumed water*

- *Continue water recycling especially in export areas where wastewater is not returned to Delta tributaries, the Delta, Suisun Marsh or Suisun Bay*
- *Improve treatment and water quality of wastewater discharges and runoff (urban and agricultural) to Delta tributaries, the Delta, Suisun Marsh and Suisun Bay*

Long Term (2051-2100)

- *Restore large areas of interconnected habitat (Section 85302(e))*

Chapter 2: Science and Adaptive Management for a Changing Delta

This chapter is well written and utilizes the best available science. However, this chapter does not contain enough specific information regarding implementation and financing of adaptive management. CCWD would like to reiterate that guaranteeing sufficient funds upfront for adaptive management in perpetuity through endowments is not reasonable; this would effectively stop many restoration projects because they would be unaffordable by public agencies. CCWD recommends requiring a guarantee for several years of funding for adaptive management at the onset of a covered action and requirements for continued funding with mechanisms to assure funding that does not insist on endowments to fund all activities forever. The adaptive management plan should identify funding sources for long-term work required but the Delta Plan should provide for reasonable ways to guarantee funding in order to ensure restoration projects can move forward. Please see our comment letter dated April 1, 2011.

Chapter 3: Governance: Implementation of the Delta Plan

p. 39 line 36 should read ... *All covered action must be based on the best available science, information, or engineering standards as applicable.*

p. 40 lines 1 - 19 - There is no mention of financing requirements of adaptive management which is not necessarily a flaw in the Delta Plan but previous drafts did contain specific language about funding requirements. CCWD appreciates the change if in fact the Council has not made an omission error. Please see comments on previous chapter and comments submitted by CCWD April 1, 2011.

Chapter 4: A More Reliable Water Supply for California

Best Available Science - This chapter lacks references and the legislation clearly states that the Delta Plan should be based on the best available science. This chapter needs significant improvement in referencing the best available science. There are unfounded opinions throughout this chapter and an overreliance on material that has not been peer reviewed. Please update references in this chapter and throughout the document as consistent with the charge to use the best available science.

p. 45 line 19 - This is a strong statement and not well supported, specific measures of the ecosystem decline should be supported by peer reviewed journal articles not Hanak's most recent report.

p. 45 line 25... 'deal with infrastructure' is not a specific action that the council will take so the policy should be refined so as to describe action.

p. 46 lines 23-30. In this paragraph, the nexus with the IRWMP is not clear and if there is a connection, it should be identified and expanded.

p. 47 lines 27- 28 and 37 - The Delta Plan should use the legislative language contained in section 85021; the term 'reducing dependence on the Delta' is not included in the legislation so that term should be replaced with the legislative language 'reduce reliance' or 'improve regional self-reliance'.

p. 47 line 31 should read... *'will be provided for a minimum period of at least six months in the event Delta diversions...'* In Delta users would be severely affected by any catastrophic event in the Delta that disrupts export pumping.

p. 47 lines 34 through line 37 should read... *'Evaluation of Planned Investments in Regional Self-Reliance: Identify specific programs and projects that will be implemented over the twenty year planning period to improve regional self-reliance which may include one or more of the following activities:'*

p. 47 line 38 - Water conservation and water use efficiency should be separated into two distinct bullet points as they do not mean the same thing. Conservation generally means using less water but water use efficiency often means using the same amount of water but getting more out of that water (especially in agriculture).

p. 48 line 3 through 11 - It is not clear what is meant by water balance. A mathematical definition or an example should be included so the policy can be understood. Is this policy for regions that have groundwater overdraft or rely on imported water? The concept of water balance as it appears in this section may not be relevant to upstream or in-Delta users even though the Council has jurisdiction over covered actions within the Delta. The usefulness of this requirement as it would be implemented should be considered in the context of the Council's jurisdiction.

p. 48 WR P3 It is not clear that the Council has the authority to mandate changes in water suppliers' rate structure nor does the policy contain any repercussions if there is failure to comply. CCWD recommends changing this from a policy to a recommendation and that water resources policy #1 already provides agencies with an opportunity to improve regional self reliance through changes in the rate structure if that is feasible for that agency.

p. 49 Delta Instream Flow Criteria and the Setting of Flows
This section should start with line 36. All language prior to that is not relevant.

p.50 WR P4 - As noted by Les Grober from the State Water Resources Control Board (SWRCB) during the April workshop, the schedule currently outlined in the Delta Plan for implementing

flow objectives is unrealistic. Line 13 should read ... *'By June 2, 2014 adopt flow objectives for the Delta that are necessary to achieve the coequal goals'*. The Delta Plan should omit any implementation schedule at this point.

p. 50 WR P4 - Another bullet should be added that the Council will work with the SWRCB to develop the implementation of the flow objectives.

p. 50 WR P4 line 15 - The date seems unrealistic, the Council should work with SWRCB to identify a feasible schedule.

p. 50 WR P4 lines 17-19 - This portion of the policy should be deleted as there is no sense in stopping projects that will advance the coequal goals as a way to encourage SWRCB. The policy could indicate that once flow criteria have been adopted and implemented, any covered action shall be consistent with those objectives.

p. 50 lines 21 through 29 - None of these options promote collaboration or provide concrete pathways to improve water supply reliability. Option B eliminates any increases in storage which is counter to the legislation and intention of the Delta Reform Act.

p. 50 lines 35 through 38 are overly general and should be deleted.

p. 51 line 24 should read... *The Delta Plan recommends incentive based programs that would increase local or regional storage, including groundwater recharge. The Delta Plan recommends that operation of new storage projects focus on long-term reliability rather than annual yield such that more water is diverted to storage during wet periods so that water is available during dry periods.*

Performance Measures

p. 54 lines 38-39 - There should not be a performance measure for reduced dependence on the Delta as that is not included in the statute.

p. 55 line 1 - As noted earlier, the concept of water balance is poorly defined and may not be applicable for in-Delta users. This language should be recast in terms of regional self reliance, regional self-sufficiency or water supply reliability.

p. 55 line 5 - The Delta Plan should expand this recommendation to statewide water supply reliability.

Chapter 5: Restore the Delta Ecosystem

p. 61 line 26 – The term 'spatially quite stable' should be defined.

p. 61 lines 27 through 29 should read... *'The historical Delta can be divided into three primary landscapes; 1) flood basins in the north Delta, 2) tidal islands in the central Delta, and 3) distributary rivers (multiple branches flowing away from main channels in the south Delta'*

p. 62 line 1 - The spring-neap tidal cycle is based on the lunar cycle and in the Delta the largest difference in daily water levels typically occur during the spring tides, but there is always two high and two low waters every day. Is this paragraph suggesting that those areas were inundated once a month, every day at high tide, or somewhere in between? If the areas were only inundated at the highest water level, then that would most likely be less frequently than once a month. The paragraph should be updated to accurately describe how frequent these areas were inundated.

p. 67 ER P3 - All covered actions should seek to avoid and minimize impacts to any beneficial use and any remaining impacts should be mitigated. The Delta Plan should broaden the language to include impacts from restoration projects, not exempt them. Restoration projects may impact water quality and consequently agricultural, municipal and industrial beneficial uses. Those water quality impacts must be avoided, minimized and any remaining impacts need to be mitigated. Any covered actions must be consistent with the Delta Reform Act which includes numerous references to improving water quality to protect human health and the environment. Is the intent to promote only restoration activities within certain areas? What actions is this paragraph referring to? Covered actions?

p. 67 ER P4 - This policy should define the design flood (i.e. 10 year, 100 year storm) so that a geographic area can be determined. If the Delta Plan intends to extend the design floodplain to the 1,000 year storm, this policy would be inconsistent with protecting Delta as a place as it would mean that existing towns and farms within the Delta could not repair their levees.

p. 67 line 27 - Setback levees are not always appropriate so the policy should state ... *construction of new levees, substantially rehabilitating, or reconstructing existing levees in the Delta and Delta water shed shall reduce risk to people to the extent feasible and evaluate alternatives that would increase the extent of the floodplain and riparian habitat.*

p. 67 ER R1 - The Delta Plan should identify the specific projects in those areas that are already underway in some cases and include those specific projects as milestones in Chapter 1.

Chapter 6: Improve Water Quality to Protect Human Health and the Environment

p. 79 line 34-37 - The description of Delta salinity is inconsistent within this paragraph. Line 34 correctly states that pumping has generally shifted the salinity gradient upstream, and reduced salinity variability. This means that the western Delta is saltier, not fresher as stated in Line 35.

p. 79 Lines 34 through 37 should read ... *The historical record and published studies show the Delta is now managed at an average salinity level much higher than would have occurred under natural conditions (Enright and Culberson 2009, Contra Costa Water District 2010, Moyle et al*

2010). Human activities, including channelization of the Delta, elimination of tidal marsh, and water diversions, have resulted in increased salinity levels in the Delta during the past 150 years. Seasonal and inter-annual variation in salinity has also been changed, largely as the result of reduced freshwater flows into the Delta. Native species of the Bay-Delta system adapted to the historical salinity conditions that occurred prior to large-scale water management practices and physical changes in the Delta.

The water quality policies listed in the Delta Plan are insufficient. The Delta Plan should include the following water quality policies and recommendations:

p. 80 line 30 should include the following policies ...

WQ P1. Covered actions shall avoid degrading water quality to the extent practicable and reasonable consistent with existing regulations and anti-degradation policies.

WQ P2. Significant water quality degradation associated with a covered action shall be mitigated to a less than significant level.

CCWD agrees with WQ R 1-3 and believe the WQ R5 can be strengthened by including the following language:

WQ R4 or 5: All dischargers, including but not limited to urban wastewater, urban stormwater and agriculture, to the Delta and the Delta watershed should improve the quality of discharged water to the extent feasible through treatment or best management practices. Regulations should include protection of species (for example, reducing ammonia and other constituents that adversely affect restoration goals) and protection of drinking water.

WQ R7 should read... 'The Central Valley Regional Water Quality Control Board, consistent with existing Water Quality Control Plan policies and water rights law, should require responsible entities that discharge waste water treatment plant effluent or urban runoff to Delta waters to evaluate whether all or a portion of the discharge can be recycled or treated to reduce contaminant loading to the Delta.'

p. 82 line 31- This should be deleted because there is no definition of salinity variability in the Delta Plan or defined goals for salinity variability either temporally or spatially. Existing variation in salinity varies greatly with space and time in the Delta and the complex interplay between bathymetry, land use, and salinity make this an unrealistic performance measure.

p. 82 Performance Measures

The Delta Plan should include specific measureable targets whenever possible. Even if this version of the Delta Plan will not include quantification of the existing conditions due to time constraints, the data sources that should be used to determine trends needs to be identified. For example the water quality performance measures should seek to answer the following questions:

- a. Who is measuring drinking water constituents of concern?
- b. How is it being measured?
- c. Who will aggregate and analyze the data collected to assess trends? Over what time period?

- d. Who is responsible for communicating or monitoring progress?
- e. Is progress measured as a decrease in constituents of concern or just not an increase?

Chapter 7: Reduce Risk to People, Property and State Interests in the Delta

Although this chapter has improved considerably there are two key improvements that should be made.

p. 93 RR R3 should include the additional recommendation that a coordinated plan be developed among stakeholders to minimize water supply disruption following a catastrophic event in the Delta. A fifth bullet should be added on p. 94 ... *'The State Water Project, Central Valley Project and local agencies within the Delta should develop an emergency response plan to coordinate restoring drinking water supplies following a catastrophic event in the Delta.'*

p. 95 RR R6. CCWD does not support the creation of a new agency that collects money at the local level to support governance and implementation of flood management at the state level. To the extent public and private agencies are required to protect their own assets, then they should do so with local control. This recommendation creates unnecessary administrative costs, and takes the decisions for expending funds away from the local agencies who are best suited to make decision on how best to protect their assets.

Chapter 9: Finance Plan Framework to Support Coequal Goals

CCWD is pleased to see this chapter included for the first time.

p. 108 Guiding Principles - The water quality objective is absent from the guiding principles and should be given equal weight to water supply reliability and ecosystem, etc.

p. 108 lines 5 through 7 - Eliminate exclusionary phrase that restricts State and federal funds to activities solely related to public benefits. The underlying "beneficiary pays" and "stressor pays" principles should govern who pays for what.

p. 111 FP R2 – Proposition 1E is in part for protecting the States drinking water system, so water utilities should not be included in the definition of public and private agencies with infrastructure in the Delta who must protect their own assets. To the extent public and private agencies are required to protect their own assets, then they should do so with local control. The idea of implementing a fee and passing it over to the Council for allocation creates unnecessary administrative costs, and takes the decisions for expending funds away from the local agencies who are best suited to make decision on how best to protect their assets.

p. 112 FP R4 – This proposal appears to circumvent the "beneficiary" and "stressor" pays guiding principles, in that it earmarks Proposition 1E funds for a specific purpose "acquisition of land or easements for the propose San Joaquin/South Delta Flood Plain". No projects/regions should get special designation at this point in the process.

p. 112 FP R5 – This proposal is devoid of specifics as to how the “continuous” funding would be utilized, or what degree of oversight and control there would be over the funds. This proposal should be eliminated unless a clear scope work/business purpose and accountability structure can be demonstrated.

p. 112 FP R7 – The District is not opposed to user fees as long as they are developed and applied equitably across all beneficiary and stressor groups, and as long as they are allocated and distributed at the local level. There is no basis for funding operations of the Council, etc. on an advance basis for ten years, when it is not clear yet what their ongoing mission will be, or whether they are best suited to implement a plan once developed.

p. 113 FP R10 – It is not appropriate to establish a Public Goods Charge for Water to fund obligations currently funded by the State General Fund. This approach would circumvent the guiding principles of “beneficiary” and “stressor” pays since that analysis has not been completed, and take an activity that has broad application (ecosystem costs) and fund it from a specific group (water utilities). It should remain funded from the General Fund unless and until the “beneficiary” and “stressor” pays analysis is completed and determines another funding approach is more appropriate.